

Remarks

Claims 69-81 were previously pending, with Claims 69, 78, and 80 being independent. The Applicant herein amends Claims 69, 78, and 80 to clarify the claim language, as supported by at least paragraphs [0084], [0087], and [0088] of the originally-published Specification. No claims have been added or cancelled, and thus Claims 69-81 remain pending.

Claims 69-79 stand rejected under 35 USC §103(a) as being unpatentable over Ando in view of Tahara. Claims 80-81 stand rejected under 35 USC §103(a) as being unpatentable over Wu in view of Tahara. The Applicant respectfully submits that Claims 69-81 are patentable over the art of record and respectfully refers the Examiner to the above claim amendments and the reasons set forth below.

Claim 69 recites “a method of distributing video sequences in a coded stream,” where the coded stream is made up of a succession of frames. Each frame includes “at least one intra-frame coded image (I picture) and at least one Prediction coded image corresponding to differences between at least two images of the succession of images.” An original coded stream is analyzed prior to transmission, and a first modified stream and a second stream are generated. The two generated streams are separately transmitted from a server to a destination device. At the destination device, the first modified stream and the second stream are synthesized to reconstruct the original stream.

The first modified stream, as recited in Claim 69, includes a modified Prediction coded image and an I picture that is not modified. The modified Prediction coded image is a randomly generated image or a result of swapping two Prediction coded images, so that the modification from the at least one Prediction coded image results in a visually altered video sequence. The first modified stream maintains an encoding system applied to the original coded stream after the

modification. The second stream includes digital information for allowing reconstruction from the modified Prediction coded image. Thus, the method according to Claim 69 modifies the Prediction coded image so that an encoding system, such as an MPEG reader, is not disturbed by the modifications. The second stream is sent separately from the first modified stream to prevent copies of the original coded stream being made and distributed. Then the information in the second stream, which provides for a reconstruction to the original coded stream, is used with the first modified stream for reconstruction at the destination device.

Ando is directed to a compression algorithm that attempts to remove some frames and replace them with data that allows for reconstruction. With reference to FIG. 3 of Ando, Ando describes that a series of frames of moving images are transmitted to a prediction error accumulating device 22 and a delay device 23. Ando states that "in the prediction error accumulating device 22, prediction errors of the frames are calculated one after another, and absolute values of the prediction errors are calculated." (See column 9, lines 39-46 of Ando.) The delay device 23 is "for delaying frames input to the apparatus 21 until the prediction errors of the group of frames are accumulated in the prediction error accumulating device 22." (See column 9, lines 13-16 of Ando.)

The Applicant respectfully submits that the frames described by Ando are in sharp contrast to the streams of Claim 69. In particular, in Claim 69, the modified stream is built by either replacing a frame by a randomly generated frame or by swapping two frames. Thus the modified stream of Claim 69 does not contain prediction error data, as does the stream described by Ando, but instead is part of the original stream. Moreover, the resulting modified stream of Claim 69 is the same data size as the original stream as a frame is either replaced by another frame or two frames are swapped, neither of which affects the size of the stream. This is in sharp

contrast to Ando, in which the stream of prediction errors of the frames are not the equivalent data size as the original series of frames.

Moreover, the compression algorithm and technique described by Ando results in a single stream of data ("output data" from buffer memory 40 in FIG. 3 of Ando), which is in contrast to the separation of the two streams that are separately sent in Claim 69.

Thus, the Applicant respectfully submits that Ando does not disclose the feature of the original coded stream being analyzed and generated into a first modified stream and a second stream as recited in Claim 69.

The Rejection acknowledges that Ando fails to disclose the feature of "synthesizing said first modified stream and said second stream at the destination device to reconstruct said original coded stream, separately transmitting the two generated streams from a server to a destination device," as recited in Claim 69. The rejection turns to Tahara for this teaching. (*See* Page 4 of the Office Action of January 24, 2011.)

Tahara is directed to splicing video streams for digital broadcasting. Splicing refers to "the technique of connecting two different coded bit streams so as to generate connected bit streams," i.e., editing and connecting coded streams. (*See* column 3, lines 28-34 of Tahara.) Tahara's system aims to edit coded streams received at a local station by a key station by replacing part of the coded stream with a coded stream portion created or stored at the local station, i.e., connecting two different coded bit streams. Tahara's digital broadcasting system includes a key station 30 and a local station 40. At the key station 30, video and audio data for commercials and main portions are connected, coded, and multiplexed to output one multiplexed transport stream. (*See* Fig. 7 and column 9, lines 24-65 of Tahara.) At the local station 40, the multiplexed transport stream is demultiplexed, converted into elementary streams, coded,

recorded, and spliced with streams produced at the local station 40. (See Fig. 7 and column 10, line 9-column 11, line 21 of Tahara.)

The Applicant respectfully submits that Tahara's system does not synthesize a first modified stream and a second stream to reconstruct an original coded stream and does not separately transmit the two generated streams from a server to a destination device, as recited in Claim 69. Instead of synthesizing a first modified stream and a second stream to reconstruct an original coded stream, Tahara takes separate and distinct data streams that are each complete on their own (emphasis added). In Tahara there is no second stream that includes information necessary for a reconstruction of the first modified stream to the original stream. Instead, Tahara's digital broadcasting system deals with distinct streams (emphasis added). The elementary streams referenced in the Rejection are streams that form a service, such as video, audio, and data streams. (See Page 4 of the Office Action of January 24, 2011.) Each of these streams are complete and are not formed by removing elements from the original stream, as recited in Claim 69.

Moreover, the Applicant respectfully submits that Tahara does not remedy the deficiencies described above with respect to Ando. In particular, Tahara does not describe generating a first modified stream and a second stream as recited in Claim 69.

Therefore, as the combination of Ando and Tahara does not disclose each feature recited in Claim 69, the Applicant respectfully submits that Claim 69 is patentable over any theoretical combination of Ando and Tahara.

Independent Claim 78 recites, similar to Claim 69, the creation of a first modified stream and a second stream from an original coded stream. Therefore, the Applicant respectfully

submits that Claim 78 is patentable over Ando and Tahara for the same reasons described above with respect to Claim 69.

With respect to independent Claim 80, the Rejection relies on the combination of Wu and Tahara in the rejection. However, neither Wu nor Tahara disclose the first modified stream and the second stream as recited in Claim 80.

Wu discloses a general description of the MPEG format with the I and P frame. Wu does not teach or suggest the step of forming a second stream that is distinct from the first stream, which is recited in claim 80. The Applicant respectfully submits that the rejection's characterization of Wu's teaching of the I frame and the P frame as equivalent to the two streams recited in the rejected Claim 80 is in error. In sharp contrast to teaching the I and P frame as each representing separate streams, Wu teaches that the I and P frame are part of a GOP in a single stream. For example, Wu states that "Each Group of Pictures contains one I-frame, multiple P-frames and B-frames." (See column 4, lines 43-44; see also column 3, lines 18-30 of Wu (discussing a single MPEG data stream as including I frames, P-frames, and B-frames).) Because Wu teaches that the I-frame and P-frame are each part of a single GOP or single MPEG data stream, one skilled in the art would understand that Wu does not teach two separate streams.

Additionally, as described above with respect to Claim 69, Tahara also does not describe generating a first modified stream and a second stream as recited in Claim 80.

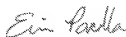
Therefore, as the combination of Wu and Tahara does not disclose each feature recited in Claim 80, the Applicant respectfully submits that Claim 80 is patentable over any theoretical combination of Ando and Tahara.

The Applicant respectfully submits that the above differences set forth with respect to Ando, Tahara, and Wu are such that any combination of Ando, Tahara, and Wu fails to result in

a method, system, and device that contains each and every claimed aspect of the subject matter recited in independent Claims 69, 78, and 80, respectively, and their respective dependent Claims 70-77, 79, and 81. The Applicant respectfully submits that the pending claims are allowable over Ando, Tahara, and Wu.

In view of the foregoing, the Applicant submits that the entire Application is now in condition for allowance, which action is earnestly requested.

Respectfully submitted,



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